incrassate, with a black-tipped spine at middle beneath and one, or a few, scattered black-tipped spines or teeth between it and the apical series, between the spine preceding the series and the subapical series a low concolorous or black-crested carina: the usual two subapical spines with a linear row of smaller spines or teeth or tubercles between them; tibiae flat, curved. tuberculate or dentate on the inner margin of the curve medially, and terminating in a long spine or spur on the inner apex, a lateral longitudinal groove on both faces; tarsal segment I not quite twice as long as the remaining two (II and III) taken together.

Abdomen: narrow (155:49), connexivum paler than the disc above; apical angles of segments IV, V and VI with small spines, that of segment VI the longest; margins smooth, slightly calloused: ventral segments transversely finely rugose or striate, III, IV and V broadly white discally, producing the effect of a broad median vitta; last segment much darker; all segments laterally paler; genital segment not examined criti-

General color: testaceous, some specimens dark, verging on fuscous.

Dimensions: length, 13.5 mm., width, 4 mm. (at humeri, including spines); size range of other specimens 10.5–14.25 mm. width. 3.5-4.2 mm.

Plesiotype: male, Habana, Cuba; collected by F. Z. Cervera; other specimens, 6 males and 12 females, same data. All specimens compared with the plesiotype.

## A METHOD OF COLLECTING NESTS OF SOME SOCIAL HYMENOPTERA.

By Albro Tilton Gaul, Brooklyn, N. Y.

It is often of value to the entomologist to obtain the nests of the social insects to study the immature brood, queens or parasites or even to remove the nest to a place where its inhabitants may be more readily observed. The following technique circumvents the hazard presented by the stinging species, yet keeps the insects in an optimum condition for study.

It is important that no attempt should be made to secure the nests except during a rainfall or in the late evening when all the members of the colony are within. If the nest is attacked in the daytime, even though the insects within may be quelled, there are inevitably some members afield who return and set up a vicious stinging campaign. Only when all the insects are within the nest should no interference be expected.

The necessary equipment consists of the following: A cardboard box large enough to hold the nest and tight enough to prevent the escape of the insects; a long pair of forceps to avoid handling the nest before anaesthetising the inmates; about 25 cc. of ether if the nest is to be reestablished elsewhere, or xylene (or any other volatile hydrocarbon) if the insects are to be killed. Absorbent cotton is used to plug the nest entrance. A knife and trowel are invaluable in securing the subterranean colonies and a flashlight is used for the more desirable night attack.

Roll the cotton into a tapering form so that it will easily block the nest entrance. Soak the roll with the anaesthetic and quickly plug the entrance. If the nest is made of paper it is also desirable to pour the remaining anaesthetic over the nest. Be careful not to shine the flashlight on the nest for too long periods as the insects, especially the Vespidae, become curious and come out; the use of some sort of red filter over the light might prevent this, but I have never found this necessary. As soon as the humming dies out it is safe to put the nest in the box.

The larvae and pupae are not visibly affected by the treatment which stuns the adults, and it is not long before the pupae will emerge. This method is particularly effective with the species of *Bremus* and *Vespula*. It is the only way I know of obtaining a number of specimens of *Vespula arctica* as this species will not leave the nest of its host, *Vespula diabolica*, when the nest is disturbed.

Species of *Polistes*, who make uncovered nests, may be taken by putting an ether soaked cotton wad in a shallow battery jar and holding it under the nest until the adults succumb, when the nest may be cut down.

Wanted.—Short notes, from 3 to 20 lines, to fill blanks such as this.—Editor.